Evidence-Based Treatments for PTSD:
What the Research Tells Us about Patient Improvement

Research can help us estimate how well people with PTSD will do if they get an evidence-based treatment. A meta-analysis allows researchers to combine the results of many individual studies. In this way, they can draw conclusions about the effects of different treatments.

Researchers affiliated with the National Center for PTSD recently did a meta-analysis of every published randomized study of Cognitive Processing Therapy (CPT), Eye Movement Desensitization and Reprocessing (EMDR), Prolonged Exposure (PE), and Selective Serotonin Reuptake Inhibitors (SSRIs) in the treatment of PTSD. The full results of the research should be published in 2012.

These effects are reported using a measure called **effect size**. Effect size tells us how big or noticeable a change is.

- An effect size of 0.2 is considered small. The person might notice a change.
- An effect size of 0.5 is considered medium. The person would notice it, and so would friends and family.
- An effect size of 0.8 is considered large. Everyone would notice it.

Because studies only include some of the people who get a treatment, an effect size is not a perfect estimate. It is the best guess. If you did the study over again with different people you would probably get a result that is close to, but not exactly the same as, the first result. This margin of error is called a confidence interval.

Let's look at how people in different treatment do over time. The effect size in this **within-group analysis** will tell us how much better patients are at the end of treatment compared to the start.

For comparison, it's also important to look at outcomes for people who were not in an evidence-based treatment. In this case:

- "Other treatment" means a treatment that does not focus on the trauma.
- "No treatment" means that people were placed on a waiting list for the duration of the study. They were simply measured at the beginning and end of the study period, and did not actually get any treatment.
- "Placebo" means people got a pill that looked like the medication being studied but did not have any medicine in it. The people receiving the placebo did not know whether they were getting the active treatment or not. The psychiatrist they would meet with over the course of the study also did not know that the patient was getting a placebo.

The results from the meta-analysis are in the table below.

INTERVENTION	EFFECT SIZE	CONFIDENCE INTERVAL
Prolonged Exposure (PE)	1.91 (very large)	1.52 - 2.30
Eye Movement Desensitization and Reprocessing (EMDR)	1.89 (very large)	1.07 - 2.71
Cognitive Processing Therapy (CPT)	1.81 (very large)	1.41 - 2.21
Other treatment	0.798 (medium - large)	0.68 - 0.92
No treatment	0.42 (small - medium)	0.33 - 0.53
Selective Serotonin Reuptake Inhibitors (SSRIs)	1.64 (very large)	1.13 - 2.16
Placebo	1.20 (very large)	0.98 - 1.45

Remember that an effect size of 0.8 is a large effect. It is the kind of effect or difference that is noticeable to anyone.

CPT, EMDR, and PE all have effect sizes well over 0.8, meaning they are very good treatments that are likely to help. With such a big effect size, the person being treated would feel much better, and others would see the change as well. These changes are much greater than what would happen for patients getting another treatment or no treatment at all.

Now let's look at SSRIs. Again, the effect for these patients is very large. It would be noticeable to the patient and to others, Interestingly, the effect size for placebo is also very large. For these patients, meeting with a psychiatrist and believing they were being helped appears to have had some positive benefit.

SUMMARY

Evidence-based treatments for PTSD work. All of the treatments we discuss---CPT, EMDR, PE, and SSRIs---help people with PTSD more than no treatment at all and more than alternative treatments that are available in the community. For people with PTSD, the best bet for recovery is evidence-based treatment.